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ILLINOIS COMMERCE COMMISSION

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STATE OF ILLINOIS

ILLINOIS COMMERCE COMMISSION

COMMONWEALTH EDISON COMPANY :

No. 00-0361

Petition for Approval of a Revision to
Decommissioning Expense Adjustment Rider
to Take Effect on Transfer of ComEd's
Generating Stations :

COMMONWEALTH EDISON COMPANY'S

DRAFT PROPOSED ORDER

ILLINOIS
COMMERCE COMMISSION
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COMMONWEALTH EDISON COMPANY'S
DRAFT PROPOSED ORDER

By the Commission:

I. PROCEDURAL HISTORY

On May 17, 2000, Commonwealth Edison Company ("ComEd" or the "Company") filed a petition ("Petition") with the Commission for approval of a revised decommissioning expense adjustment rider (the "Revised Rider 31"), which will limit ComEd's recovery of decommissioning costs for customers to a fixed amount over a six year period. At the end of six years, ComEd customers would have no further responsibility for decommissioning costs. The Revised Rider 31 would take effect following the transfer of ComEd's Nuclear Generating Stations (the "Nuclear Stations") to an affiliate generating company (the "Genco"), a wholly-owned subsidiary of Exelon, formed in connection with the merger of Unicom Corporation ("Unicom") and PECO Energy Company ("PECO"). This six-year period tracks a power purchase agreement (the "PPA") under which the Nuclear Stations will continue to provide electricity to Illinois jurisdictional customers of ComEd.

Petitions to intervene were filed by the People of Cook County ("Cook County"), the Illinois Attorney General's Office on behalf of the People of Illinois (the "Attorney General"), the City of Chicago ("City"), Citizens Utility Board ("CUB"), the Environmental Law and Policy Center ("ELP"), NewEnergy Midwest LLC ("NewEnergy"), Enron Energy Services ("Enron"), the Illinois Industrial Energy Consumers ("IIEC"), and Citgo Petroleum, the Metropolitan Chicago Healthcare Council, R.R. Donnelley & Sons Company, and General Mills, Inc. (collectively the "Chicago Area Industrial & Healthcare Customers Coalition" or "Coalition"). These petitions to intervene were granted by the Hearing Examiners.

On May 30, 2000, ComEd filed the direct testimony of Thomas LaGuardia ("LaGuardia"), President of TLG Services, Inc., Robert E. Berdelle ("Berdelle"), Vice-President and Comptroller of ComEd, Robert K. McDonald ("McDonald"), Vice-President of Unicom, Randall L. Speck ("Speck"), a partner in the law firm of Kaye,

Scholer, Fierman, Hays & Handler, LLP in Washington D.C., and Calvin Manshio ("Manshio"), a partner in the law firm of Manshio and Wallace.

On June 1, 2000, Cook County moved to dismiss and/or consolidate this docket with ICC Dockets 99-0115 and 00-0191. ComEd, CUB, the Attorney General, and the Coalition filed responses to Cook County's motion. ComEd filed a reply to the responses of the Coalition, Attorney General and CUB. Cook County, in turn, filed its reply. On June 28, 2000, the Hearing Examiners denied Cook County's motion, and also ruled that administrative notice would be taken of the record in ICC Docket No. 99-0115, a prior ComEd rider 31 proceeding for which the record was marked "heard and taken" and for which no order has been issued. On July 19, 2000, Cook County filed a petition for interlocutory review of this ruling. ComEd filed a response to this petition on July 26, 2000. The Commission issued its order denying Cook County's petition for interlocutory review on August 11, 2000.

On June 2, 2000, the Hearing Examiners conducted a hearing on scheduling matters. On June 5, 2000, ComEd filed a petition for interlocutory review of the Hearing Examiners' ruling regarding scheduling. Responses to ComEd's petition for interlocutory review were filed by Staff, the Coalition, the City, IIEC, and Cook County. On June 20, 2000, the Hearing Examiners' issued a memorandum and notice of the Commission's action denying ComEd's petition for interlocutory review.

On July 11, 2000, ComEd filed the Supplemental Direct Testimony of Messrs. Berdelle and Speck.

On July 31, 2000, Staff prefiled the direct testimony of Theresa Ebrey ("Ebrey"), an accountant in the Accounting Department of the Financial Analysis Division of the Commission, and William Riley ("Riley"), Chief of the Electric Section in the Engineering Department of the Energy Division of the Commission. The following intervenors prefiled direct testimony: David J. Effron ("Effron"), a consultant specializing in utility regulation, on behalf of the Attorney General; Robert Stephens ("Stephens"), a consultant with the firm of Brubaker & Associates, Inc., on behalf of IIEC; Edward C. Bodmer ("Bodmer"), a consultant in the electric utility industry, on behalf of the Coalition; Bruce Biewald ("Biewald"), President of Synapse Energy Economics, Inc., and David Schlissel ("Schlissel"), President of Schlissel Technical Consulting, Inc., on behalf of CUB and the City, and Dr. Phillip O'Connor ("O'Connor") on behalf of NewEnergy.

On August 14, 2000, ComEd filed the rebuttal testimony of Messrs. Berdelle, Speck, LaGuardia and Manshio. ComEd filed additional rebuttal testimony by L. Joseph Callan ("Callan"), a consultant and the former Executive Director for Operations for the United States Nuclear Regulatory Commission ("NRC"), and Jay K. Thayer ("Thayer"), Vice-President, Decommissioning for Duke Engineering & Services, Inc. On that same date, the rebuttal testimony of Staff witness Riley and intervenor witnesses Effron and Bodmer was also filed.

On August 16, 2000, the Attorney General filed the amended rebuttal testimony of Effron.

On August 18, 2000, CUB and the City jointly moved to compel ComEd to respond to CUB's fifth and sixth data requests and for an extension of time. They filed a revised motion on August 22, 2000.

On August 21, 2000, pre-hearing memoranda were filed by Staff, Coalition, IIEC, City and CUB, Cook County, and the Attorney General. On August 23, 2000, ComEd filed its pre-trial memorandum.

From August 24, to August 29, 2000, an evidentiary hearing was held with respect to ComEd's Petition. ComEd, Staff, Attorney General, Cook County, City, CUB, ELP, Coalition, IIEC, and NewEnergy appeared. On August 24, 2000, CUB's and the City's joint motion to compel and for an extension of time was denied. ComEd then presented the testimony of seven witnesses: McDonald, Speck, Manshio, LaGuardia, Thayer, Callan, and Berdelle. Staff presented the testimony of Riley and Ebrey. CUB and the City presented the testimony of Schlissel and Biewald. IIEC presented the testimony of Stephens. NewEnergy presented the testimony of O'Connor. Coalition presented the testimony of Bodmer. The Attorney General presented the testimony of Effron. At the conclusion of the hearing on August 29, 2000, the record was marked "heard and taken."

During the hearings, on August 24, 2000, the Hearing Examiners granted in part and denied in part intervenors' oral motions to strike portions of Speck's testimony. On August 28, 2000, the Coalition moved to strike portions of the rebuttal testimony of Thayer, which was denied. On August 28, 2000, the City and CUB moved to strike portions of the direct and rebuttal testimony of Manshio, which motion was denied on August 29, 2000.

ComEd filed a draft order. Initial and reply briefs were filed by ComEd, Staff, the City, the Attorney General, Cook County, IIEC, ELP, and Coalition.

The Hearing Examiners' proposed order was served on the parties.

The record contains detailed and comprehensive evidence supporting the decommissioning expense adjustment sought by ComEd in the petition. The record also contains substantial evidence concerning the proposed revisions to Rider 31 sought by ComEd.

II. DESCRIPTION OF THE PROPOSED REVISED RIDER 31

In its Petition, ComEd proposed to collect \$120.933 million per year through the Revised Rider 31 for a six year period, as described below, and thereafter to recover no additional money for decommissioning costs from its customers.

ComEd's proposal is made in connection with its plan, pursuant to the pending Unicom Corporation merger with PECO Energy Company, to contribute its Nuclear Stations and form the Exelon Genco. In connection with the transfer of the Nuclear Stations, ComEd intends to enter into certain agreements with the Genco, including a Power Purchase Agreement, which provides for ComEd's purchase of power from the

Genco, a Contribution Agreement, and an Interconnection Agreement pertaining to the Nuclear Stations.

Under the PPA, ComEd would obtain all of its power supply from the Genco through 2004. In 2005 and 2006, ComEd would obtain all of its power supply from the Genco, up to the available capacity of the Nuclear Stations. ComEd would obtain any additional supply required from market sources in 2005 and 2006, and, subsequent to 2006, would obtain all of its supply from market sources, which is likely to include power purchased from the Genco and the Nuclear Stations since the Stations will be generating electricity in northern Illinois.

Under the PPA, the price of energy provided to ComEd through 2004 is intended to approximate the cost to ComEd of energy produced by the Nuclear Stations were there to be no transfer of assets to the Genco, assuming an aggregate nuclear capacity factor of 85%. Energy prices will be fixed for the first four years and are stated in a schedule to the PPA. The schedule of energy prices in the PPA protects ComEd from any increases in energy prices attributable to increases in nuclear station operating costs, additional investments in station improvements, increases in market prices of energy, and deterioration in nuclear plant performance. Energy prices for the years 2005 and 2006 will be set at then prevailing market prices, which will be subject to FERC approval.

Under the Contribution Agreement, the assets in the decommissioning trusts will be transferred to the Genco, and the Genco will be responsible for decommissioning the Nuclear Stations and will bear the risk for increases in decommissioning costs and any shortfalls in the decommissioning trusts at the time of decommissioning. ComEd will be responsible, as a matter of contract, for decommissioning costs and is obligated to collect these costs from retail customers and convey these funds to the Genco for inclusion in the decommissioning trusts to pay for decommissioning of the Nuclear Stations. Under the Public Utilities Act (the "Act"), collection of decommissioning charges from customers is authorized when ComEd has "responsibility as a matter of contract for decommissioning costs." (220 ILCS 5/16-114.)

During the proceeding in response to four issues that were raised by Staff, ComEd clarified and modified its proposal in the following ways:

- First, ComEd agreed to make the proposal asymmetrical, obligating Genco to bear all of the risk of higher costs, but committing it to refund to ratepayers any funds that remain in the decommissioning trusts in the unlikely event that there is a surplus after all of the stations are decommissioned.
- Second, ComEd has agreed to the inclusion of a requirement in the trust agreements governing Genco's use of decommissioning funds that, to the extent money is available after radiological decommissioning is completed, non-radiological decommissioning will be performed.

- Third, ComEd has agreed to a condition making collection of Revised Rider 31 monies from ratepayers in 2005 and 2006 dependent upon ComEd and Genco reaching agreement on a market price and purchasing ComEd's requirements up to the available capacity of the nuclear stations in those years.
- Fourth, ComEd has agreed to forever waive any right to seek additional decommissioning collections after the expiration of the six-year decommissioning collection period and to accept this condition in writing.

ComEd had moved to stay its 1999 and 2000 decommissioning cases (Docket Nos. 99-0115 and 00-0191, respectively) pending the resolution of this docket. Once the merger and transfer of assets to the Genco take place, ComEd has committed that it will move to withdraw its petitions filed in both the 1999 and 2000 decommissioning cases.

III. OVERVIEW OF PARTIES' POSITIONS

A. ComEd's Position

ComEd explained that it has made a comprehensive proposal under which ratepayers will contribute for six years toward the costs of decommissioning the company's nuclear stations, and, after those payments are made, customers will have no further responsibility for decommissioning costs. ComEd stated that approval of ComEd's proposal will provide certainty for ratepayers, reduce by \$1 billion the amount customers contribute for decommissioning costs, eliminate the obligation of customers to make decommissioning payments that are scheduled to continue from 2007 through 2027, and eliminate the significant risk that customers will be required to pay substantially increased costs in the future. Those increased costs could result from uncertainty over such critical matters as the availability and escalating cost of low level radioactive waste disposal, unreimbursed spent fuel storage costs, expanded decommissioning work scope, more rapid rates of general inflation and poorer-than-expected investment performance.

ComEd further stressed that its proposal also provides the level of decommissioning funding necessary to enable a new generating company ("Genco") to accept the transfer of ComEd's nuclear stations and assume the liability to decommission the stations. Absent approval of the proposal, Genco will be unable to complete the transfer and customers will not enjoy the benefits that arise from separating ComEd's nuclear generation assets from the company's transmission and distribution business, insulating ratepayers from many of the risks of the generation business and fostering the development of a competitive generation marketplace in ComEd's service territory.

ComEd submitted unchallenged cost estimates prepared by the leading experts in the field, TLG Services, Inc. which establish that the cost to decommission ComEd's nuclear stations in 2000 dollars total \$5.6 billion – approximately \$3.1 billion more than the amounts now held in the decommissioning trusts. (ComEd Ex. 1 (LaGuardia

Direct) at 7-8, Schedule TSL-1; ComEd Ex. 2 (Berdelle Direct) at 3, lines 18-28.) Therefore, ComEd explained, under any reasonable assumptions, decommissioning payments from the Genco in addition to those requested under ComEd's proposal will be necessary to fund that shortfall. (ComEd Ex. 8 (Berdelle Rebuttal) at 3-6.) No decommissioning cost estimates were prepared by any of the witnesses who testified in favor of Intervenor or Staff.

ComEd Vice-President and Comptroller Robert Berdelle described the detailed financial analysis supporting ComEd's proposal, demonstrating that the interests of ratepayers would be well served by a cutoff of decommissioning payments after six years of contributions at the \$120.9333 million level. Use of the actual 7.81% decommissioning cost escalation rate called for by the formula approved by the Commission would result in much higher payments. (ComEd Ex. 8 (Berdelle Rebuttal) at 8-9; Berdelle, Tr. 1139.) Even use of a 4.73% rate, on which ComEd based its proposal for a \$120.9333 million contribution level for 2001 through 2006, would mean higher payments because it requires substantial contributions from 2007 through 2027, which, under ComEd's proposal, ratepayers will not be required to fund. (ComEd Ex. 6 (Berdelle Supp. Direct) at 9.)

ComEd explained that its proposal offers customers substantial benefits including:

- A reduction in decommissioning rate collections, producing savings to customers of more than \$1.0 billion;
- Certainty of electric rates for decommissioning;
- An end to annual Rider 31 rate litigation;
- Assumption by the Genco of the risks of decommissioning fund undercollection; and
- Assumption by the Genco of responsibility for interim high level radioactive waste management.

The advantages of the resolution and its fairness to ratepayers have been recognized by former members of the Commission who are well-acquainted with the risks posed by ComEd's continued ownership of the nuclear stations and exposure to decommissioning cost increases. Former Commissioner Calvin Manshio endorsed the proposal, stressing the "opportunity to shift the risk of future rate increases in decommissioning costs from ratepayers and to stimulate generation competition." (ComEd Ex. 11 (Manshio Rebuttal) at 2, lines 26-27.) Former Chairman Dr. Phillip O'Connor, who is now the Chairman of NewEnergy, a leading participant in the Illinois restructured electricity market, emphasized "the goals of enhancing the environment for customer choice and market competition." (NewEnergy Ex. 1 (O'Connor Direct) at 2.)

B. Staff's Position

Staff recommended a reduction in the amount ComEd could collect through Rider 31 from ComEd's requested amount of \$120.933 million to \$78.9 million. First, Staff argued it was inappropriate to include the cost of site restoration of approximately \$515 million for ComEd's nuclear stations because Staff contended there would be no assurance that Genco would undertake this expense. (ICC Staff Ex. 2 at 6-7.) Staff argued that removing site restoration expenses would reduce the annual cost of service by approximately \$20.9 million. Staff additionally argued that ComEd's proposal should be reduced by approximately \$1.9 million per year to reflect the removal of spent fuel storage costs at the Zion station that were the result of the United States Department of Energy's ("DOE") delay in accepting spent fuel. Staff further proposed a reduction of an additional \$20 million per year to account for the impact of decommissioning costs due to presumed license renewal at one or more of ComEd's nuclear units. (ICC Staff Ex. 2 (Riley Direct) at 7-8.) Staff also advocated reducing the period during which decommissioning charges would be recovered.

In response to Staff's concerns, Mr. Berdelle presented the four clarifications and modifications to ComEd's original proposal discussed earlier in this order to provide assurances and eliminate any cause for concern about the merit of ComEd's proposal. (ComEd Ex. 8 (Berdelle Rebuttal) at 15-18.)

C. Intervenors' Positions

Coalition witness Bodmer objected to ComEd's proposal arguing that "if something is good for Edison then it is bad for ratepayers." (Coalition Ex. 1 (Bodmer Direct) at 4.) He and other intervenor witnesses claimed that ComEd and the Genco would reap the benefits of any increased efficiencies that result from the Unicom-PECO merger or from any developments of new decommissioning technology and would receive a "windfall" because of the inclusion of a contingency factor in the estimates relied on by ComEd. (Coalition Ex. 1 (Bodmer Direct) at 8, 14, 19-20; Attorney General Ex. 1 (Effron Direct) at 9-13; CUB DT Ex. 1.1 (Biewald Direct) at 3-4, 11-12.) Intervenors assumed that decommissioning costs would be reduced if ComEd received license extensions for its plants for an additional twenty years or delayed dismantlement of the plants. They assumed that investment earnings on the decommissioning trust fund would exceed the escalation rate of increases in decommissioning costs throughout this period and, on this basis, argued no additional funds should be collected from ratepayers. (IIEC Ex. 1 (Stephens Direct) at 9-11; CUB DT Ex. 1.2 (Schlissel Direct) at 20-22.) Intervenors also claimed that any unexpected increases in the cost of decommissioning would be accounted for by the contingency factor in TLG's decommissioning estimate. (CUB DT Ex. 1.1 (Biewald Direct) at 3-4; Coalition Ex. 1 (Bodmer Direct) at 14.)

In response, ComEd witnesses explained why no new decommissioning economies of scale or decommissioning cost efficiencies could be expected from the merger, as the merger would not affect decommissioning labor rates and ComEd's estimates already assumed maximum efficiency. They also explained why license extensions could not be assumed and that, indeed, plants might not be able to operate even for their full license lives for a variety of factors. Similarly, ComEd's witness

Thomas LaGuardia explained why delays in decommissioning could lead to shortfalls and were not in ratepayers' interests. Moreover, ComEd witnesses showed how the argument that extending the time for decommissioning would lead to greater revenue presumed a continued favorable spread between the amount returned on the investment of the decommissioning trust fund and the escalation rate for the costs of decommissioning. History showed the opposite to be true, meaning that extensions would probably result in shortfalls rather than surpluses. Indeed, Mr. Biewald admitted, in Docket 99-0115 that "decommissioning could easily end up costing far more than ComEd's current estimates." (CUB DT Ex. 1.1 (Biewald Direct) at 6.) The six year timetable proposed by ComEd's proposal eliminates this risk to customers. ComEd witnesses also showed that the decommissioning contingency factor did not take into account any of the financial risks associated with decommissioning but only addressed increased costs resulting from conditions on the project site which would inevitably occur.

Finally ComEd responded to the argument that its proposal would result in a "windfall" to the Genco. ComEd explained that its agreement to obligate Genco to bear all the risks of higher costs, but committing to refund to ratepayers any funds that remain in the decommissioning trusts in the unlikely event that there is a surplus after all of the stations are decommissioned, removes any possibility that Genco will somehow benefit unfairly at the expense of ratepayers.

Instead of ComEd's proposal, the Coalition recommended that the Commission either order ComEd to hold a bid auction for its decommissioning liability and its decommissioning funds or develop an allocation methodology that attributes a share of the decommissioning costs to Genco and provides for a "true-up" of ratepayer contributions for decommissioning costs and refunds as new information arises. (Coalition Ex. 1 (Bodmer Direct) at 10-12.)

ComEd showed why these alternatives should be rejected. ComEd witness Thomas LaGuardia, a highly experienced expert on decommissioning costs and business practices, explained that: (i) no regulatory body has ever adopted Mr. Bodmer's claimed approach, so the proposal has no track record of success; (ii) because decommissioning requires work to be performed over a period of many decades, it is difficult to imagine that any bidder could be found who would commit to perform work now scheduled to extend through 2030; and (iii) if Mr. Bodmer's "bid auction" approach were followed and a new party were brought in to perform decommissioning, the benefits associated with the experience of existing station staff would be lost. (ComEd Ex. 10 (LaGuardia Rebuttal) at 11.)

In addition to these factors making the bid auction proposal unrealistic, Mr. Bodmer himself admitted that he had not considered adverse tax consequences that would result if the decommissioning trust funds were transferred to a bidder who did not have an interest in the nuclear power plants. (Bodmer, Tr. 1461-1464.) Nor had he reviewed applicable NRC regulations, which would prohibit Mr. Bodmer's bid auction proposal, because a licensee may not transfer its obligation to decommissioning nuclear plants to a third party. 10 CFR §50.75; (Bodmer, Tr. 1474-75.)

ComEd witnesses also responded that Mr. Bodmer's decommissioning allocation schemes were ill-considered because he failed to take into account the substantial and unlimited risk that Genco bears to fund all increases in decommissioning costs in the future, costs which ComEd witnesses showed could be enormous as a result of escalation in the costs of storage costs, expanded scope of decommissioning work, and other matters. (ComEd Ex. 4 (Speck Direct) at 8-18; ComEd Ex. 12 (Speck Rebuttal) at 18-36.)

IV. APPLICABLE LEGAL STANDARD

A number of intervenors questioned whether the Commission had statutory authority to approve the Revised Rider 31 based on their argument that, once ComEd transfers its Nuclear Stations to the Genco, the Nuclear Stations are no longer subject to the Commission's jurisdiction or dedicated to public service. Therefore, they argued that ComEd's proposal must be rejected because it seeks to charge ratepayers for decommissioning of plants which are not owned by a utility. (See, e.g., Prehearing Memoranda of City and CUB at 4-5; Cook County at 1-2; IIEC at 2.)

The Commission has considered these arguments, and concludes that approval of ComEd's proposal is authorized by the Public Utilities Act, including sections 9-201.5 and 16-114. Section 9-201.5 provides that the Commission may authorize charges to customers for the costs of decommissioning. 220 ILCS 5/9-201.5(a). Decommissioning rates established under section 9-201.5 may be in effect for a six-year period. 220 ILCS 5/9-201.5(d). As in this case, revenues collected under such decommissioning rates may be used "to reduce the amounts to be charged under such rates or tariffs in the future." 220 ILCS 5/9-201.5(a). That is exactly the effect that the payments to Genco for six years will have. Such payments will be used to reduce to zero the amounts to be charged to customers for decommissioning in 2007-2027 and any subsequent years.

Use of an agreement between ComEd and Genco, such as the Contribution Agreement under which Genco accepts the responsibility for decommissioning the stations, is also authorized by the Act. Specifically, section 16-114 of the Public Utilities Act permits recovery of decommissioning costs for "each utility ... having responsibility as a matter of contract ... for decommissioning costs as defined in Section 8-508.1." Section 8-508.1 defines "decommissioning costs" to include "all reasonable costs incurred" Section 8.508.1(c)(3)(i) permits the existing assets in the decommissioning trusts to be disbursed to Genco for deposit into Genco's decommissioning trusts because doing so will, in part, "satisfy the liabilities of [ComEd] ... for nuclear decommissioning costs...." 220 ILCS 5/8-508.1(3)(i). Section 8.508.1(c)(3)(iii) recognizes that, when a public utility "sells or otherwise disposes of its direct ownership interest ... in a nuclear power plant...", the utility may arrange for "another entity" to assume the public utility's "liability for future decommissioning," which results in the selling utility retaining responsibility as a matter of contract for decommissioning costs. Therefore, both the use of existing trust fund assets and contracting for six years of future decommissioning payments are authorized by the Act.

Similarly, intervenors challenge whether ComEd's proposal provides a just and reasonable rate for purposes of 220 ILCS 5/9-201(c). As noted above, Staff and intervenor witnesses recommended a reduction in ComEd's decommissioning collections based upon potential license extensions, increased efficiencies, technological improvements, delays and actual decommissioning, elimination of site restoration expenses and other reasons. The Commission finds that substantial evidence shows that lower decommissioning costs cannot be assumed and that there is a considerable risk that decommissioning costs will increase. ComEd's proposal eliminates this risk for customers and provides certainty to customers. Moreover, customers get the benefit of any surplus remaining at the conclusion of decommissioning. The proposal represents a just and reasonable rate.

V. COSTS OF DECOMMISSIONING, OVERALL AND PLANT SPECIFIC

ComEd noted that its decommissioning cost estimates for its 13 nuclear units were prepared by the national expert, TLG Services, Inc. TLG is highly qualified to provide such estimates and has prepared site-specific decommissioning cost-studies for more than 85% of the nuclear plants in the United States, all of the operating commercial nuclear units in Canada, and one unit in Japan. (ComEd Ex. 1 (LaGuardia Direct) at 6.) TLG has also been extensively involved in actual decommissioning activities on many different nuclear decommissioning projects. (ComEd Ex. 1 (LaGuardia Direct) at 5.) TLG's president, Thomas LaGuardia, who was responsible for preparing and presenting the estimates, is a foremost expert in his field. Decommissioning cost estimates prepared by Mr. LaGuardia and TLG have been reviewed and accepted by the NRC, the Federal Energy Regulatory Commission and public utility commissions throughout the country, including this Commission. (ComEd Ex. 1 (LaGuardia Direct) at 7.) CUB's witnesses confirmed Mr. LaGuardia's expertise. (Biewald, Docket 99-0115 Tr. 148, 195-96; Schlissel, Docket 99-0115 Tr. 322.) No party presented any evidence that TLG's cost estimates for radiological and nonradiological decommissioning are inaccurate or unreasonable in any way.

A. Radiological Decommissioning Cost Estimates

ComEd explained why site-specific radiological decommissioning cost estimates of \$4.682 billion are reasonable. TLG reviewed the estimates previously approved by the Commission in Docket 97-0110 and updated for presentation in Docket 99-0115, and found that the estimates are reasonable. (ComEd Ex. 1 (LaGuardia Direct) at 8.) In particular, the estimates for ten of ComEd's nuclear units – Dresden Units 2 and 3, Quad Cities Units 1 and 2, LaSalle Units 1 and 2, Byron Units 1 and 2 and Braidwood Units 1 and 2 – are reasonable and unchanged from their last approval by the Commission in Docket 97-0110. (ComEd Ex. 1 (LaGuardia Direct) at 8.) ComEd Ex. 1 (LaGuardia Direct) at 9, Docket 99-0115.) The cost estimates for these ten nuclear units account for approximately \$3.595 billion of the \$4.682 billion of ComEd's total estimated radiological decommissioning costs, expressed in 1996 dollars. (ComEd Ex. 1 (LaGuardia Direct), Sch. TSL-1.)

ComEd's estimates submitted for Dresden Unit 1 and Zion Units 1 and 2 were updated in 1999 to reflect changed circumstances. (ComEd Ex. 1 (LaGuardia Direct) at 18, Docket 99-0115.) With respect to Dresden Unit 1, the cost estimates reflect

changes since the estimate approved in Docket 97-0110. The net effect of these changes is to reduce the estimated Dresden Unit 1 radiological decommissioning costs by approximately \$35 million, for a total of \$362.8 million.

With respect to Zion Units 1 and 2, the cost estimates reflect increased certainty in the nature and scope of required radiological decommissioning made possible after the permanent cessation of nuclear generation operations at that station. Based upon detailed system inspections conducted after the shutdown, including assessment of secondary-side steam generator equipment, TLG concluded that the costs of decommissioning Zion Unit 1 would be \$406.6 million in 1996 dollars and that the cost of decommissioning Zion Unit 2 would be \$497.7 million. (ComEd Ex. 1 (LaGuardia Direct) at 11, 14-15, Sch. TSL-1, Docket 99-0115; ComEd Ex. 1 (LaGuardia Direct) at 8, Sch. TSL-1.)

No party presented any evidence in this proceeding or in Docket 99-0115, that the costs of decommissioning Zion or any other station, would be lower than estimated by TLG. On the contrary, CUB witness Biewald testified that "I don't have a reason to dispute the Company's estimate" for Zion decommissioning costs. (Biewald, Tr. 243, line 22-244, line 2, Docket 99-0115.)

CUB witnesses argued that decommissioning will cost less than TLG estimates because of "economies of scale" which will occur as a result of the Unicom-PECO merger. (CUB DT Ex. 1.1 (Biewald Direct) at 11-12; CUB DT Ex. 1.2 (Schlissel Direct) at 30-32.) These witnesses noted that in a proceeding before the Vermont Department of Public Service, AmerGen, a company that will be a ComEd affiliate when the Unicom-PECO merger is complete, indicated that decommissioning costs there would be approximately 23% lower than TLG estimated due to such economies. On this basis, they argued, the Commission should assume a 20% reduction in disbursements caused by economies of scale which, they argued, would result in a \$680 million surplus for the 13 nuclear units in question. (CUB DT Ex. 1.1 (Biewald Direct) at 12.) From this premise, these CUB witnesses argued that ComEd may already have collected adequate funds from ratepayers for decommissioning these units. (CUB DT Ex. 1.2 (Schlissel Direct) at 32.)

In response, ComEd explained why the pending Unicom-PECO merger will not provide any significant decommissioning "economies of scale" or "synergies and efficiencies" that would substantially reduce decommissioning costs. Mr. LaGuardia noted the cost estimates here already are based on ComEd's ownership of thirteen nuclear plants and maximum efficiency in the decommissioning process. (ComEd Ex. 10 (LaGuardia Rebuttal) at 8.) He specifically considered whether the Unicom-PECO merger would reduce costs of decommissioning, and explained that because decommissioning activities are so labor intensive, the merger would not be expected to produce cost reductions for decommissioning. (LaGuardia, Tr. at 469.)

B. Non-Radiological Decommissioning Cost Estimates

ComEd presented a thorough study prepared by TLG of the costs of non-radiological decommissioning of ComEd's thirteen nuclear units. (TSL-9.) Non-radiological decommissioning involves "demolition" of station structures that are not

designated for future use after the highly destructive radiological decommissioning process is completed. (TSL-9, at v; ComEd Ex. 13 (Thayer Rebuttal) at 4, 8; ComEd Ex. 10 (LaGuardia Rebuttal) at 10.) Because radiological decommissioning does not result in the complete dismantlement of "[s]ubstantial portions" of the nuclear stations that are not contaminated, many station facilities remain for disposal during the non-radiological decommissioning process.

As explained by TLG, during the non-radiological phase of decommissioning:

Site structures will be removed to a nominal depth of three feet below the local grade level whenever possible. Foundation grade slabs greater than three feet in thickness will be abandoned in place and covered over with a three-foot layer of backfill. The site will then be graded and stabilized. This study therefore includes removal costs for all outlying structures not deemed suitable for follow-on use by ComEd or others.

(TSL-9 at v.)

ComEd argued the record overwhelmingly supports the conclusion that TLG's estimate of the cost of non-radiological decommissioning is reasonable. The analysis was conducted using very conservative assumptions designed to assure that the estimate included no expenses for removal of structures that could be re-used. If there was any possibility that a building or facility might possibly be re-useable, the cost of removing it was excluded from the estimate. (Berdelle, Tr. 1104, 1106, Docket No. 99-0115; LaGuardia, Tr. 728-29, 735-36, Docket No. 99-0115.) No party presented any evidence in the present proceeding, or in Docket 99-0115, that the cost of the non-radiological decommissioning activities described in the TLG study would be lower than estimated by TLG.

The Attorney General's witness, Mr. Effron, argued that non-radiological decommissioning costs should not be considered based on his understanding that this goes beyond NRC requirements and the requirements of Illinois law and may never actually be incurred depending on the use of the sites after decommissioning is completed. (Attorney General Ex. 1 (Effron Direct) at 11.) Likewise, IIEC witness Stephens argued that it is not reasonable to assume the Genco will perform any activities over and above NRC requirements that may have been required or recognized in Rider 31 levels. (IIEC Ex. 1 (Stephens Direct) at 9.)

Similarly, Staff's witness Mr. Riley argued that non-radiological decommissioning costs should not be considered by the Commission because of a need for greater assurance that site restoration work would actually be performed by the Genco. (ICC Staff Ex. 2 (Riley Direct) at 6.) However upon cross-examination, Mr. Riley testified that he reviewed the need for non-radiological decommissioning in Docket 99-0115, and in that proceeding described ComEd's evidence as to that need as "convincing". (Riley, Tr. 519-20.) In Docket No. 99-0115 Mr. Riley recommended that site restoration costs be included in the cost of decommissioning ComEd's nuclear stations. (Id; Staff Ex. 3 (Riley Direct) at 13, Docket No. 99-0115.) In addition, here, Mr. Riley agreed that receiving an assurance that the Genco would

perform non-radiological decommissioning after cessation of radiological decommissioning activities would somewhat allay Staff's concerns about considering these costs. (Riley, Tr. 522-23.)

After Mr. Riley, Mr. Effron and Mr. Stephens had filed their testimony, ComEd committed that if ComEd's proposal is approved, the funds in the decommissioning trust will be used for both radiological and, to the extent available, non-radiological decommissioning. (ComEd Ex. 8 (Berdelle Rebuttal) at 2.) Moreover, ComEd addressed Staff's specific concern that there be a legal obligation to expend trust fund money for non-radiological decommissioning. Mr. Berdelle explained that the legal trust agreements governing the use of decommissioning funds will provide, to the extent that funds are available after completion of radiological decommissioning, that such trust funds will be used for non-radiological decommissioning. (ComEd Ex. 8 (Berdelle Rebuttal) at 16-17, Berdelle, Tr. 968-69.)

C. Commission's Conclusion

The record shows that ComEd's proposal in this proceeding is based upon fundamentally sound, conservative and reasonable estimates of the costs to decommission the Stations. The decommissioning cost studies underlying ComEd's proposal were prepared by TLG, an industry leader in making such estimates. No other party challenged the recovery of these estimates or presented any alternative estimates. ComEd's estimates of radiological decommissioning costs in the present proceeding are based upon the estimates previously approved by the Commission in Docket 97-0110 and updated by TLG in Docket 99-0115.

Moreover, the evidence supports considering the need for funding non-radiological decommissioning in assessing the overall costs of decommissioning. This is particularly true since ComEd has provided a detailed assurance in the record that funds in the decommissioning trust will be used for non-radiological decommissioning to the extent available.

ComEd's studies show that the cost to decommission the Stations is \$5.6 billion in 2000 dollars. As of December 1999, assets in the decommissioning trusts for the Stations totaled \$2.5 billion, leaving a \$3.1 billion shortfall in the decommissioning trust funds. Absent the order in this docket, ComEd would have the right to look to customer payments under Rider 31 and trust fund earnings to make up the total amount of this shortfall. However, ComEd is seeking to recover substantially less than this and an amount the Commission finds to be just and reasonable.

VI. ESCALATION FACTORS

A. Rate Components Generally

Under ComEd's Rider 31, the components used to determine the decommissioning cost escalation rate and the weights to be given to each component were established by the Commission in Docket 97-0110. The escalation rate for "wages" is based on an employment cost projection by RFA, a nationally recognized

firm, and receives a weighting of 37%. The escalation rate for "other decommissioning costs" is based on an estimate of the Consumer Price Index by RFA, and receives a weighting of 33%. Finally, the escalation rate for waste burial costs is based on costs reported on the tables in Appendix B of the Nuclear Regulatory Commission's NUREG 1307 (excluding the South Carolina Low Level Waste Disposal Tax) for the Barnwell facility, and receives a weight of 30%.

B. Low Level Waste Escalation Rate

The low level waste burial escalation rate, calculated using the methodology approved by the Commission in Docket 97-0110, which is based on the average annual rate of escalation for the most recent three years at the Barnwell facility, is 22.44%. (ComEd Ex. 8 (Berdelle Rebuttal) at 7, lines 35-40.) ComEd witnesses explained that, although the Commission's formula focuses on a three-year period, the escalation in low level waste burial costs at the Barnwell facility over longer periods of time confirms that low level waste burial cost increases will far outpace the general rate of inflation and will continue to drive the costs of decommissioning to higher and higher levels. Over the past 20 years, the annual escalation in burial costs at the Barnwell facility has been approximately 21%. (ComEd Ex. 4 (Speck Direct) at 11, lines 11-13.)

Staff witness Riley testified that there is no strong indication that the more than 10 percent per year inflation rate for low level waste burial will continue. (ICC Staff Ex. 2 (Riley Direct) at 9.) However, he calculated that the 5 and 7-year compound average escalation rates were about 17%. (Staff Ex. 2 (Riley Direct) at 9, Table 2.2.)

C. Overall Escalation Rate

ComEd's proposal of \$120.9333 million annual decommissioning cost of service for 2001 through 2006 is based on an overall escalation rate of 4.73% calculated using the weightings proposed by ComEd and Staff in Docket 99-0115 and imposing a 10% cap on the waste burial escalation rate suggested by Staff here.

However, at the hearing, ComEd's witnesses repeatedly testified that the 7.81% overall escalation rate determined based on the formula used in Docket 99-0115 and the actual, uncapped burial escalation rate and not the 4.73% capped rate is most appropriate. (Berdelle, Tr. 1124-1125; Speck, Tr. 369.) They explained that use of the 7.81% rate is appropriate because the reason for inquiring here about the rate of increase in future decommissioning costs is to assess the advantages of ComEd's proposal for ratepayers. Use of a 7.81% rate does not increase the amount that customers will be required to pay for six years. ComEd has already fixed that rate in arriving at its proposal.

Only one intervenor witness, Attorney General witness Effron, attempted to calculate an overall cost escalation rate. He calculated a 3.70% average escalation rate based on experiences in 1993-98 for pressurized water reactors. (Attorney General Exhibit 2.1 (Effron Rebuttal) at Schedule DJE-1B.) But he admitted that, in making his calculation, he did not comply with the Commission's orders. He (1) used the wrong cost escalation formula, and (2) miscalculated the rate of increase in waste